



EXECUTIVE COMPUTING

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HP LaserJet offers quiet print choice

In the beginning, there was the office computer, and it was good — good and loud, thanks to the rat-a-tat of the impact printer it was hooked up to. Now two amazing technologies are promising to change the way offices sound, not to mention the economics of printing.

Called “laser printing” and “resistive ribbon thermal transfer,” they are fast, almost silent and offer superb print quality. Laser printing has been used for years with mainframe computers but has recently been perfected and released in a low-cost version for small computers. Canon, the Japanese company, has set the printer industry on its ear with a low cost “print engine” that uses a laser beam to charge a Xerox-type drum and produce copies similar to an office copier.

The other promising quiet printing technology, resistive ribbon thermal transfer, is embodied in IBM’s line of Quietwriter printers and typewriters. Unlike the laser printer, which prints a whole page at a time, the Quietwriter appears to operate like a daisy-wheel printer, but without the print wheel. As the print head travels across the paper, ink seems to be painted on. Actually, it is melted from the ribbon to the paper by electrodes in the print head.

Today, I’m reviewing the latest entry in laser printing — the one I consider the more attractive of the two technologies — Hewlett-Packard Co.’s LaserJet. In a future column, I’ll tackle IBM’s Quietwriter.

H-P’s Laserjet

H-P’s LaserJet uses the Canon print engine and is compatible with the IBM PC and PC work-alikes, including H-P’s own Touch Screen computer. While laser printers have traditionally been as big as desks and priced from \$20,000 on up, this one fits comfortably on your desk and costs about \$3,500.

(Other low-cost laser printers are on their way. Apple recently announced a version, at about double the price of the LaserJet, and Xerox just announced it will also market a similar machine based on its own design.)

The LaserJet takes about 20 seconds to print the first page and about 10 seconds for each additional page — including the time to access a floppy disk from your word processing program. That's double or triple the speed of the fastest daisy-wheel impact printers.

Aside from the noise of the unit's built-in fan (which is about as loud as the IBM PC's fan), the only thing you hear is the occasional sound of paper shuffling. Because it uses a Xerox-type process with a drum and toner to produce an image on the paper, I expected the print quality to be similar to the best office copiers. I was surprised to find that it's much better.

Apparently the laser beam is not only used to charge the drum, but also to clean it so that no extra specks appear. Also, H-P did a very good job of designing their fonts to resemble normal typewriter print, and made several fonts available.

Sounds great, but there's one factor that severely limits the LaserJet's effectiveness. I was stunned to discover that H-P chose not to adopt any of the commonly accepted printer standards for their new machine, such as the Diablo print codes for daisy wheels or the Epson codes for dot matrix printers.

Thus, only a handful of word processing packages are currently usable with the machine. Similarly, you can't use most of the several thousand other business programs available for the IBM PC. You might check with your local LaserJet dealers to see about support for your particular programs.

Other drawbacks

✓ The LaserJet can't handle continuous forms, only cut sheets, just like an office copier. You can work around this, though. The machine can print sideways on a page in reduced-size characters, enabling you to print spreadsheets or wide reports that would normally go on 132-column computer paper.

✓ The price is still steep. Even though it is remarkably inexpensive compared to other laser printers, at \$3,500 it is still about \$1,500 more than the cost of a good daisy-wheel printer with a noise-muffling acoustic cover. So, in situations where speed or luxurious ease of use are not important, it is certainly possible to save money by not buying this printer.

The bottom line

My recommendation is that given the LaserJet's limited software compatibility, there are just two situations that are currently suited for this printer.

The first is where everyone in the office already uses one of the word processing programs compatible with the machine. Especially if more than one computer could share the printer — perhaps linked in a local network — it could be a very cost-effective purchase. The second situation is an office that's acquiring a word processing program and printer for the first time.

For those who already use programs in their office which are incompatible with the LaserJet, is it worth the time or expense to install and learn new programs in order to use the printer? In my opinion, no.

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